

INTRODUCTION

Objectives

This report is designed to help Idaho Department of Lands personnel develop policies to fulfill the department's endowment land management objective: Maximizing long-term revenue to the beneficiary institutions while maintaining the capability of the forest to ensure a perpetual flow of forest products. Data collected from continuous forest inventory (CFI) plots was used to:

- Determine current stand conditions;
- Compute net volume change; and,
- Analyze the impacts of harvest alternatives.

Abbreviations, definitions, and timber type descriptions used throughout this report can be found in the appendices.

Geographic Area

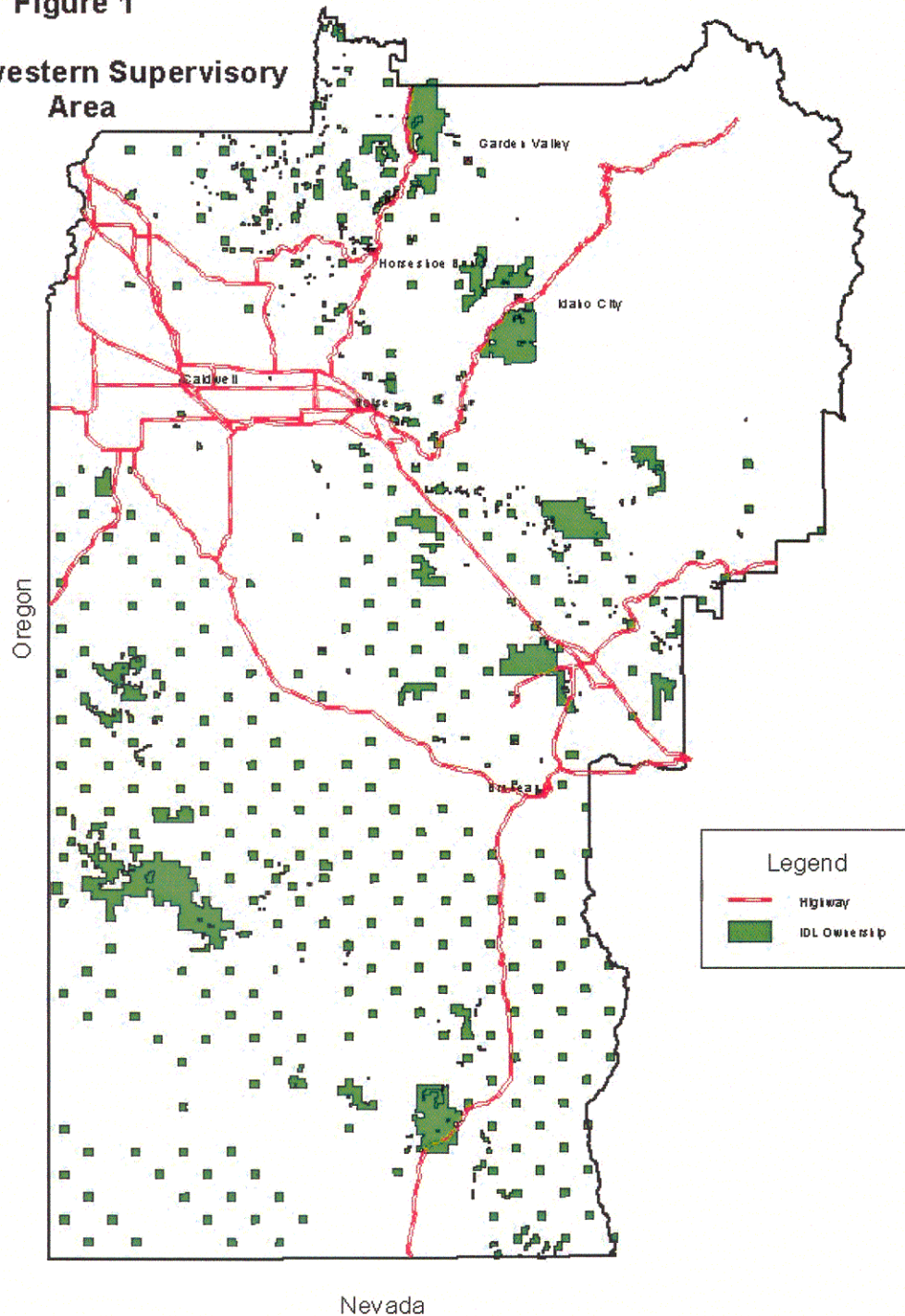
The Southwestern Idaho Supervisory Areas are located in Ada, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington counties (Figure 1). The Area is bounded on the west by the State of Oregon, the south by the State of Nevada, the east by the Southcentral Supervisory Area, and the north by the Payette Lakes Supervisory Area.

Historical Perspective

In 1890, the President of the United States signed the Idaho Admission Bill declaring the formal existence of the State of Idaho. The Admission Bill granted the new state selected lands including the equivalent of two of every 36 square miles of federally owned land in Idaho. These lands were acquired under a trust agreement whereby proceeds from these lands would exclusively benefit certain designated public institutions, primarily public schools. This trust agreement as defined in federal statutory laws and the state constitution stipulates that Idaho's state lands be managed "... **in such manner as will secure the maximum long term financial return to the institution to which granted...**" This mandate is more specific than the federal policy of managing federal lands for attainment of maximum benefits for the public.

Prior to the 1974 remeasurement, Southwestern Idaho and Payette Lakes Supervisory Areas were combined as one supervisory area.

Figure 1
Southwestern Supervisory Area



The Southwestern Idaho Supervisory Area inventory plots were initially established and measured in 1968. Subsequent remeasurements were completed in 1974, 1986, and 1996.

The Boise Basin and South Fork Boise River unit of the Southwestern Idaho Supervisory Area is dominated by Douglas-fir and ponderosa pine. The Packer John unit is more of a coniferous mix containing almost all of the lodgepole pine, grand fir, Engelmann spruce, and subalpine fir volume.

Soils are mainly sandy to loamy soils over moderately to well decomposed granitic bedrock with masked fracturing. Landform types are maturely dissected mountain slopes with rounded ridgetops.

2002 Remeasurement Procedures

The CFI plots were measured during the summer of 2002 using procedures outlined in the 2001 "Forest Inventory Field Procedures, Specification, and Definitions" manual.

Timber typed (Appendix C and D) and land management bases (Appendix E) were assigned to all endowment lands on the area. These types were field verified during the summer of 2002. The annual harvest alternatives were analyzed using the primary base only. The secondary forest land is not included in the harvest analysis, however, harvest operations may occur in these areas.

The Department of Lands CFI precision goal is ± 10 percent at the 95 percent confidence level for all sawtimber types combined. In addition, each sawtimber type had a minimum of 30 subplots. To meet this goal, 136 randomly distributed plots were measured (97 previously established permanent plots and 39 new temporary plots). The maximum acreage represented by any subplot was 300 acres.

The standard error for all timber types combined is statistically sound at 8.3 percent at the 95 percent confidence level (Table 1).

**Table 1. Data Reliability by Timber Type
Southwestern Idaho Supervisory Area**

Primary Timber Type	Number of Subplots	Mean	Coefficient of Variation	Percent Standard Error
11	65	6,342	0.88	21.5
12	44	13,776	0.76	22.4
13	50	23,417	0.79	22.0
21	63	3,906	0.95	23.6
22	77	8,679	0.66	14.7
23	66	13,197	0.71	17.1
All Plots ¹	365	9,066		8.3

- 1 Percent standard error for all sawtimber plots (timber types 11– 23) is based on a combined volume and SE by timber type, which is an accepted method of calculating forest inventory data.²

The overall sampling error in % is smaller than any of the individual timber type strata. This is normal. The reason is that the sum is adding up directly, but the sampling errors are compensating for each other and adding up more slowly. The larger the sample size, the lower the percent standard error.

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2. Western Forestry and Conservation Association. 2000. Using Applied Growth and Yield Tools for Forest Land Planning and Inventory. Page 9.